

X.—*Notes on the Forficularia.*—XX. *A new Genus and Five new Species from Australia.* By MALCOLM BURR, D.Sc., F.E.S., &c.

[Plate IV.]

THE Dermaptera of Australia have been neglected by collectors, and it is only quite recently that I have seen any fresh material. I have now, however, enlisted the co-operation of Mr. R. Hamlyn Harris, Director of the Queensland Museum, Mr. F. P. Spry, of Melbourne, and Mr. F. P. Dodd, of Kuranda, Queensland, from whom I have received a number of interesting species. The hitherto unknown ones are now described for the first time. In two instances the genital armature is figured and briefly described in a provisional manner.

Subfamily *TYGIDICRANINÆ.*

Dicrana hackeri, sp. n.

Parva, gracilis, pallida, fusco-ornata; forcipis brachia ♂ contigua; segmentum penultimum ventrale quadratum, margine postico utrinque emarginato, lobulo medio acuto.

	♂.
Long. corporis	16 mm.
„ forcipis	2 „

Small and slender; colour pale tawny or buff, with blackish markings; head flat, buff; pronotum slightly longer than broad, and slightly narrower posteriorly than anteriorly, anterior margin rounded, posterior truncate, sides subparallel; clytra long, blackish, with a median long buff band; wings perfect, banded with buff and blackish; scutellum ample, buff, nearly equilateral; legs buff and hairy; abdomen buff at the base, passing to deep red apically, scarcely dilated; last dorsal segment nearly square, deep red, smooth, unarmed; penultimate ventral segment ♂ quadrate, posterior margin emarginate on each side, with a feeble lobe in the middle. Forceps with branches contiguous, depressed, deep red, rather broad, straight, the tips gently curved.

QUEENSLAND: Brisbane, 1 ♂, 26. vi. 11 (*Hucker*, in Mus. Brisbane); Kuranda (*Dodd*, in c. m.).

The type will be deposited in the British Museum.

This is a delicate little species, well characterized by the form of the penultimate ventral segment of the male.

Pyge shorridgei, sp. n.

Colore fusco-testaceo, nigro-marmorato; forcipis brachia ♂ remota, valde arcuata, apice bimucronata.

	♂.
Long. corporis	20 mm.
„ forcipis	4 „

General colour dark testaceous, marbled and mottled with blackish, strongly pubescent.

Antennæ testaceous.

Head dark testaceous, indistinctly shaded with fuscous.

Pronotum about as broad as the head, parallel-sided; posterior margin straight, angles gently rounded; anterior margin distinctly convex, rounded, dark testaceous, with two indistinct blackish bands.

Scutellum broad, testaceous, banded with blackish.

Elytra narrow and short, dark testaceous, with indistinct blackish bands.

Legs dirty yellowish, indistinctly shaded with dark brown.

Abdomen testaceous, with a double black dorsal band and one down each side; gradually widening from base to apex, where the yellowish and blackish fuse into a uniform deep reddish brown. Venter dirty testaceous; last dorsal segment square, ample, smooth, broader than the abdomen, deep red-brown, with some faint blackish pattern.

Penultimate ventral segment broad and quadrate; posterior margin truncate, with a median canal in the apical half.

Pygidium hidden.

Forceps with the branches remote at the base, depressed and dilated at the base itself on the inner margin; strongly arched, including a scutiform area, meeting before the apex at a very blunt tooth, finely crenulate here, the inner margin then straight and contiguous to the tips, which are hooked.

W. AUSTRALIA: 1 ♂ (*G. C. Shorridge*, type in B. M.).

This is the only known species of *Pyge* with remote forceps and mottled uniform, recalling that of the South-African *Picrania liturata*, Stål. The forceps are very characteristic, and especially the square and sulcate penultimate ventral segment, which may later justify the erection of a new genus.

Subfamily *PARISOLABINÆ*.*PARISOPSALIS*, gen. nov.

Antennæ 15-segmentis, tertio elongato, 4 et 5 tertio brevioribus,

sed sat elongatis, haud globularibus, ceteris elongatis, pyriformibus, basi valde gracilibus, apice clavatis; prosternum parallelum; meso- ac metasterna rectangularia, postice truncata; abdomen ♂ medio dilatatum, segmentis lateribus acutis; segmentum ultimum ♂ transversum, rectangulare; forcipis brachia ♂ remota.

In the dilated abdomen approaches *Parisolabis*, Verh., but differs in the rectangular last dorsal segment and acute sides of abdominal segments. In the long pyriform antennal segments it differs both from *Parisolabis*, Verh., *Pseudisolabis*, Burr, and *Idolopsalis*, Bor.

Parisopsalis spryi, sp. n.

Glabra, nigro-rufescens; abdomen ♂ medio fortiter dilatatum, segmentis 2-9 lateralibus fortiter recurvis, acutis, segmentis singulis postice rufescentibus; segmentum ultimum dorsalo transversum, inerme; forcipis brachia basi remota et conica, recta, apice valde attenuata ac fortiter arcuata.

	♂.
Long. corporis	14 mm.
„ forcipis	2.5 „

Reddish black, glabrous; head broad, smooth, depressed, black; antennæ blackish brown.

Pronotum almost rectangular, very gently widened posteriorly, a little broader than long, sides all straight; mesonotum densely punctulate; metanotum densely punctulate, very short; legs slender, femora fuscous, tibiæ and tarsi dirty yellowish.

Abdomen depressed, strongly dilated about the middle; narrowed apically, both ventral and dorsal surfaces deep reddish black, the posterior portion of each segment in the hinder half of the abdomen clear brick-red, the black part finely and densely punctulate, the red part smooth; the sides of each segment except the first produced into an acute strongly recurved hook, the outer edge of which is keeled, and rugulose above and below the keel; last dorsal segment transverse, rectangular, unarmed, smooth, the posterior margin gently concave, and feebly swollen into an incipient tubercle over the roots of the forceps.

Penultimate ventral segment rounded.

Forceps with the branches remote at the base, stout, trigonal, conical, straight in basal third, tapering apically, and near the apex strongly and abruptly arcuate.

AUSTRALIA: Victoria, Warburton District, Christmas 1902,

2 ♂; Cape Otway Ranges, Feb. 1913, 2 ♂, 2 ♀ (Spry). Type in c. m.

I am indebted to Mr. F. P. Spry, of Victoria, for this interesting species; its appearance and the recurved abdominal hooks, recalling those of *Ancistrogaster*, render it easily recognizable.

Two of the males are ill-developed specimens; the dilatation of the abdomen is much less pronounced and the forceps are only gently arcuate apically; consequently the whole appearance is very different from that of the type, and at first I considered it a distinct species. But for the fact that there are nine abdominal segments, I should have regarded them as females.

But the differences are merely of degree, and not of kind; as they were taken at the same time and place as the typical examples, I am of opinion that they are only ill-nourished and feebly-developed specimens.

As to the genital armature, the apical segments of the metaparameres are narrow, almost parallel-sided, gently concave, about as long as the proparameres; the virga is short and rather broad, somewhat inflated towards the apex.

Subfamily SPONGIPHORINÆ.

Marava dodli, sp. n.

Rufo-castanea; elytra indistincte vittata; pygidium ♂ valde productum, basi lateribus triangulariter lobatum, apice fissum; forcipis brachia ♂ remota, subrecta, apice incurva.

	♂.
Long. corporis	6-8.5 mm.
„ forcipis	2.5 „

Small; reddish chestnut; antennæ with thirteen to fourteen segments, brown, feebly obconical, fourth a little shorter than third; head broad, dark brown or black; pronotum broadened posteriorly, yellowish anteriorly, darker posteriorly; elytra smooth, deep brown, with an indistinct yellowish band; wings brown; legs yellow, femora banded with fuscous, the anterior pair decidedly thickened; second tarsal segment long, nearly equal to the third; abdomen deep reddish chestnut, darker at the sides, pliciform tubercles distinct; last dorsal segment smooth, black, transverse; ninth sternite ample, quadrate; pygidium very large and prominent, produced into a long lobe, with a triangular dilatation on each side near the base, then nearly parallel-sided,

deeply incised at the apex, with pointed lobes; branches of forceps straight, simple, unarmed, strongly hooked at the apex.

QUEENSLAND: Kuranda, 2 ♂♂ (*Dodd*). Type in my collection.

This and the following species are very closely allied. The form of the pygidium is quite distinctive, but only the apical portion is really noticeable, the basal triangular lateral dilatations being quite hidden in one specimen and only just discernible in the other. One specimen is macropterous, the other brachypterous.

Marava hackeri, sp. n.

Para, fusco-castanea; elytra flavo-vittata; pygidium ♂ breve, latum, obtusum, margine postico lateralis minimis 4 instructo; forcepibus brachia ♂ remota, gracilia, elongata, recta, intus medio dentata.

	♂.
Long. corporis	6.5–7.5 mm.
„ forcepibus	2.75–3 „

Slender and small; reddish chestnut; antennæ greyish brown, the two basal segments yellow; head broad, blackish brown; pronotum broadened posteriorly, deep brown, with a broad yellow border on each side; elytra deep brown, with a yellow band; wings long, deep brown, with a big yellow spot; legs yellow, indistinctly banded with fuscous; abdomen deep red, darker at the sides; last tergite smooth, with feeble tumidities over the insertion of the forceps; pygidium ♂ short, broad, tumid, with four minute tubercles on posterior margin; forceps with the branches remote, slender, straight, with a small median tooth.

Apical segment of parameres broader than the basal, with gently rounded margins, broadened towards the apex and then abruptly attenuate and acute; virga long and convoluted, inflated at one end, terminating in a U-prong at the other.

QUEENSLAND: Tambourine Mts., 27th Nov., 1912 (*Hacker*). Four ♂♂ in Mus. Brisbane and c. m.

The type will be deposited in the British Museum.

This species resembles the preceding, but is of rather more slender build and a little longer. The form of the pygidium and forceps is quite different.

Marava victoriæ, sp. n.

M. hackeri vicina; differt pygidio ♂ margine postico in lobum triangularem producto.

	♂.	♀.
Long. corporis	6-6.5 mm.	7-7.5 mm.
„ forcipis	2-2.5 „	1 „

In colour closely resembles *M. hackeri*, but tints a little deeper and markings less defined; agrees in every respect except the pygidium ♂, which is produced into a depressed, rather obtuse, triangular lobe, with a point at each side and one at the apex.

VICTORIA: Fern Tree Gully, 6 ♂♂, 4 ♀♀ (*Spry*, c. m.).

This species very closely resembles *M. hackeri*, but the pygidium is quite different; the lateral points are often scarcely discernible, the apical point being the most prominent and often the only one noticeable.

EXPLANATION OF PLATE IV.

- Fig. 1. Dicrana hackeri*, sp. n. ♂, × $2\frac{1}{2}$.
Fig. 2. Pyge shortridgei, sp. n. ♂, × $2\frac{1}{2}$.
Fig. 3. Parisopsalis spryi, sp. n. ♂, × $2\frac{1}{2}$.
Fig. 3 a. Ditto. Profile of abdomen. ♂.
Fig. 4. Ditto. Genital armature. ♂.
Fig. 5. Marava doddi, sp. n. ♂, × 4.
Fig. 6. Ditto. Forceps and pygidium. ♂, × 8.
Fig. 7. Marava hackeri, sp. n. ♂, × 5.
Fig. 8. Ditto. Forceps and pygidium. ♂, × 8.
Fig. 9. Ditto. Genital armature.
Fig. 10. Marava victoriæ, sp. n. ♂, × 5.
Fig. 11. Ditto. Forceps and pygidium. × 10.

XI.—Notes from the Gatty Marine Laboratory, St. Andrews.—No. XXXVI. By Prof. M-INTOSH, M.D., LL.D., F.R.S., &c.

[Plates V. & VI.]

1. On the Ventral Furrows of the Lesser Rorqual (*Balænoptera rostrata*, O. Fabricius).
2. On some of the Species of *Prionospio*, Malmgren.
3. On the British *Amphictenidæ*.
4. On the British *Ampharetidæ*.

1. On the Ventral Furrows of the Lesser Rorqual
(*Balænoptera rostrata*, O. Fabricius).

In the numerous accounts of the structure of this species, from J. Hunter and R. Knox to Sir William Turner, the